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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/592,925	08/26/2008	Ulrich Hachmann	I432.135.101/P33804	6064

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EXAMINER	
TREAT, WILLIAM M	

ART UNIT	PAPER NUMBER
2181	

MAIL DATE	DELIVERY MODE
08/02/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/592,925	HACHMANN ET AL.	
	Examiner	Art Unit	
	William M. Treat	2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 August 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *10-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 August 2008* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2/20/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. Claims 10-29 are presented for examination.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 10-29 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Houg et al. (Patent No. 6,055,597).

4. Should applicants be unfamiliar with the “clearly anticipated” reference, they can read relevant information in the notes to form paragraph 7.15 in the MPEP. The basic premise behind a “clearly anticipated” rejection is when the applicants, as individuals of at least ordinary skill in the art, read the reference they will be readily able to recognize the relevance of the teachings of the art to their claims without explanation. However, though not necessary, this examiner usually points applicants to some particularly relevant passages in the reference and provides explanation of his interpretation of applicants’ claim language when there might be some possible ambiguity.

5. The examiner would suggest applicants read col. 3, lines 35-61; col. 6, lines 14-24; and col. 8, line 32 through col. 13, line 8, at a minimum, before responding. Review of Figures 3-6 would also be beneficial. As to the mention of coprocessors in claims 13, 18, and 25, in the examiner's judgment when Houg says: "The present invention is a bi-directional synchronizing buffer which synchronizes data flow between two components in a computer system. As used herein, a component may be any circuit or device within a computer system" (col. 3, lines 35-39), one of ordinary skill reads this definition as

encompassing coprocessors which were clearly components of computer systems at the time of applicants' invention.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 13, 15, 17-18, 25, 27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houg et al. (Patent No. 6,055,597).

9. In the examiner's judgment the substance of claims 13, 18, and 25 was clearly taught by Houg when the patent is read by one of ordinary skill. However, lest applicants waste their time arguing applicants do not see the exact words of the claim, the examiner takes Official Notice of the fact that graphics, image processing and mathematical coprocessors were conventional components of computer systems at the time of applicants' invention and one of the conventional reasons for a processor to

transfer data to a coprocessor at the time of applicants invention was because it was required for execution of a coprocessor instruction.

10. As to claims 15 and 27, while one could design the transfer of data between the two buffers to be slower than the system bus transferring data to the buffers, that would not be a logical design for one of ordinary skill. Given the fabrication technology available at the time of applicants' invention, one of ordinary skill would have fabricated Houg's device on a single integrated circuit whether incorporated in a larger circuit or created as a standalone chip. The short, on-chip transmission distances and reduced, on-chip capacitances would normally provide bandwidth for the circuit that exceeded the speed at which the system bus could deliver data given that the system-bus multiplexers and internal-bus seem to be of, at least, equal width in Fig. 3. Also, one of ordinary skill would be motivated to move the data from one buffer to the next faster than the data arrived so as not to induce wait states in the device transmitting data. Finally, bus-width, band-width, etc. are merely design parameters that are readily altered based on ones desired design criteria and do not represent patentable differentiation in this instance.

11. As to claims 17 and 29, the examiner explained above that given the fabrication technology available at the time of applicants' invention one of ordinary skill would have been motivated to fabricate Houg's device on a single integrated circuit to reduce transmission capacitance, transmission times, and power consumption.

12. In relation to the examiner's Official Notice the examiner is suggesting applicants review MPEP 2144.03 C where it points out that for an applicant to adequately traverse

an examiner's finding of fact the applicant must specifically point out the supposed errors of the examiner's action "**which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art**". It also states in that same section of the MPEP that "If applicant does not traverse the examiner's assertion of official notice or applicant's traverse is inadequate the examiner should clearly indicate in the next office action that the common knowledge or well-known in the art statement is taken to be admitted prior art because applicant either failed to traverse the examiner's assertion of Official Notice or that the traverse was inadequate. If the traverse was inadequate, the examiner should include an explanation as to why it was inadequate."

13. Lest applicants make ill-considered assertions in relation to the examiner's Official Notice, the examiner would also direct applicants to 37 CFR 1.56 where it states that each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to the individual to be material to patentability as defined in 37 CFR 1.56. This includes information that by itself or in combination with other information establishes a *prima facie* case of unpatentability or refutes or is inconsistent with a position the applicant takes in opposing an argument of unpatentability relied on by the Office or asserting an argument of patentability.

14. Any inquiry concerning this communication should be directed to William M. Treat at telephone number (571) 272-4175.

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/William M. Treat/
Primary Examiner, Art Unit 2181